The XXVIII International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY 2021)



Contribution ID: 200 Type: not specified

To simplify complicated IBP reduction coefficients via improved Leinartas' algorithm

Tuesday, 24 August 2021 10:35 (20 minutes)

We introduce improved Leinartas algorithm, to simplify multivariate rational functions via partial fraction decomposition. We use this algorithm to simplify IBP reduction coefficients, dramatically shorten the size of the coefficients. This algorithm can also be used to simply rational functions in other fields of theoretical physics.

Primary authors: BENDLE, Dominik; BOEHM, Janko; WITTMANN, Marcel; MA, Rourou; ZHANG,

Yang; XU, Yingxuan; WU, Zihao

Presenter: WU, Zihao

Session Classification: New Developments in Quantum Field Theory

Track Classification: New Developments in Quantum Field Theory